

State-of-the-art cattle slaughter lines for the next generation

By **Boukje Vreman, SFK LEBLANC, Borculo, The Netherlands.**

The largest and most modern cattle slaughterhouse in northern Europe is currently being built by Danish Crown in Holsted, Denmark. A project representing the largest one-off investment ever in the beef slaughter sector in northern Europe. The state-of-the-art cattle slaughter line, including internal transport and carcase chill stores, is the work of NAWI and represents a once-in-a-decade-project.

Expertise

The company, which since August of this year is part of SFK LEBLANC, specialise in the development, production and installation of cattle slaughter solutions. NAWI has developed and manufactured robust, high quality production lines for the food sector for over 35 years. However, to be awarded a contract of this size, is a rarity.

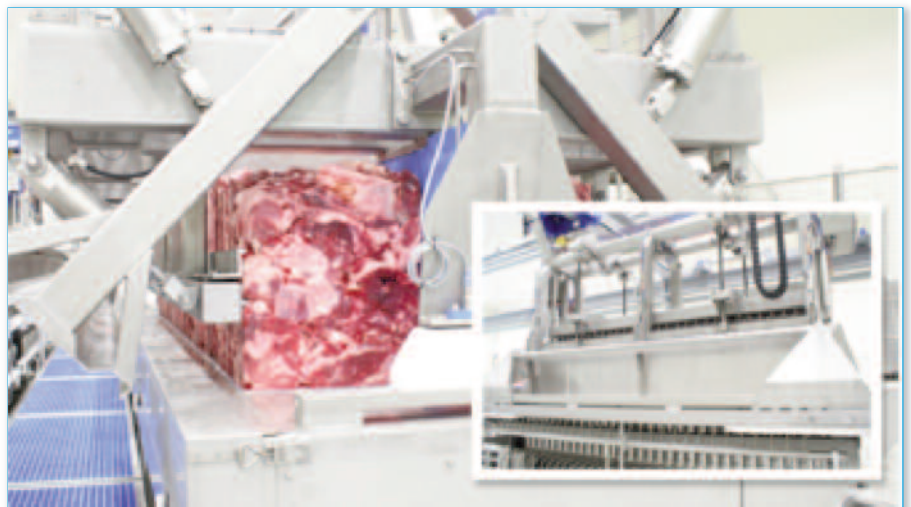
"Of course, we were absolutely thrilled when we were awarded the Danish Crown contract," Stephan Toxopeüs, managing director of NAWI, told *International Meat Topics*.

"Danish Crown clearly values our expertise and the solutions NAWI has to offer. We are extremely proud of that."

NAWI is constructing a completely new high-end slaughter line for Danish Crown, including internal transport and storage for carcasses and full 'fifth-quarter' processing facilities. With a capacity of 120 animals per hour and a total of 4,500 animals per week, the new factory in Holsted will be able to process over 230 tons of beef per day. The project requires a total investment of nearly €90 million and will provide employment to more than 300 people. Operations are expected to start in March 2014.

Joint effort

In order to make the March 2014 deadline, NAWI started the assembly and installation of the slaughter line in April of this year. A massive undertaking, according to



New plate freezer solution

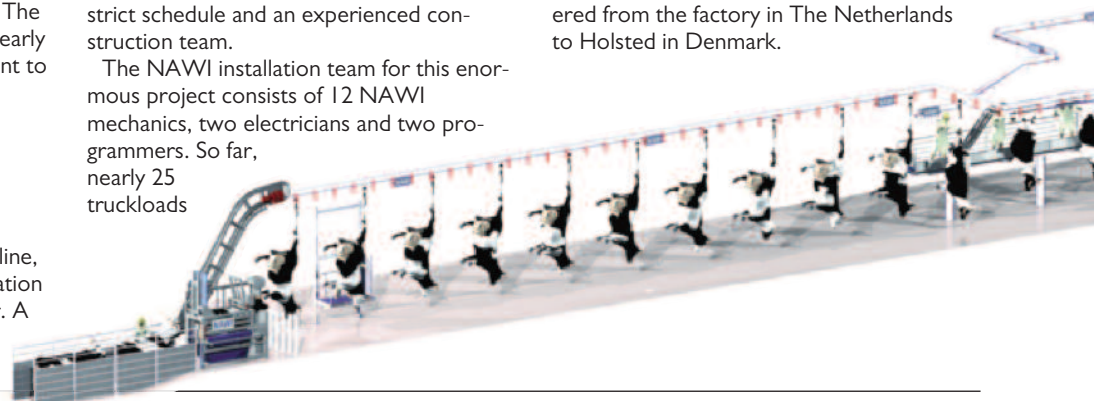
Under the brand name NAWI, SFK LEBLANC develops and implements fully customisable hygiene sensitive logistics solutions for crates, pallets, trays (dolavs) and cartons for the food industry. Alfred Klunder, category manager food production logistics at SFK LEBLANC, is proud of his product portfolio: "The internal project 'Logistics-3000' is aimed at improving the speed and performance of our logistics products. We have managed to substantially accelerate our order picking system to over 3,000 crates per hour – an impressive result. And in order to meet the growing hygiene demands from the industry, our R&D team has worked hard on improving and developing new methods and technologies."

The latest addition to the NAWI Food Production Logistics portfolio is a groundbreaking new solution for automatically filling and emptying naked block plate freezers. Initially designed as a special product, the state-of-the-art plate freezer filling system comes in two variants: a filling cassette, and a filling screw. With fill rates that are up to 15% higher and adjustable block weights, their plate freezer solutions not only increase efficiency, but also eliminate heavy work in cold conditions and save labour costs. They are proud to say that their new concept is attracting worldwide attention.

project manager Pieter Gorter, requiring a strict schedule and an experienced construction team.

The NAWI installation team for this enormous project consists of 12 NAWI mechanics, two electricians and two programmers. So far, nearly 25 truckloads

of construction material have been delivered from the factory in The Netherlands to Holsted in Denmark.



They run a pretty tight ship, in close cooperation, of course, with Martin Djørup, project manager at Danish Crown. In answer to the question why Danish Crown chose to collaborate with NAWI, Martin Djørup says: "In the preliminary phase, the NAWI solutions for the layout and design of the slaughterhouse were carefully thought out.

Their experience, expertise and hands-on mentality ultimately were the decisive factors in teaming up with NAWI. And so far, it has been a pleasure collaborating with them. On site, the NAWI-team fulfils an exemplary function."

A close and effective cooperation is key for project success, says Stephan Toxopeüs. "This cattle line is not merely a NAWI solution, but a joint effort between NAWI and Danish Crown.

Both companies bring more than a century of combined slaughter and processing experience to the table and together we are striving to create the best solution possible, keeping in mind important aspects, such as quality, hygiene, efficiency, ergonomics, flexibility, animal welfare and sustainability."

High performance

With 120 cattle per hour, the new Danish Crown facility will have the highest slaughter capacity in the whole of northern Europe.

The line starts with two cattle/veal races, leading up to two automatic stunning boxes, designed according to the latest hygiene requirements and animal welfare standards.

Stephan Toxopeüs explains the operation of the stunning box: "NAWI stunning boxes are designed to enable the cattle to be stunned efficiently and ergonomically. Since the beginning of this year, head fixation is mandatory for all European slaughterhouses.

We have therefore developed a fully adjustable stunning box with head fixation suitable for cattle and veal of virtually any size and weight. The animal is easily driven into the stunning box and fixated in an animal friendly way.

Operation is largely automatic, which allows the operators to work fast and efficiently. I am proud to say that the renowned Max Rubner-Institut – the Federal Research Institute for Nutrition and Food in

Germany – has praised our stunning box for its quality."

The line is furthermore equipped with a high-performance hide puller, motion weighing scales, ergonomic paunch removal platforms, a full-option red organ conveyor and no less than 13 30m-long fully automated chill rooms, containing over 3km of NAWI conveyor technology.

Fifth quarter optimisation

Fifth quarter optimisation is an upcoming trend in the red meat industry. Danish Crown is building a complete sub-factory for the processing of so-called fifth quarter – or offal – products.

A modern and up-to-date installation for the sorting and grading of fifth quarter meat is developed and constructed by NAWI. After grading, the products are cooled on specially designed cooling racks and further processed according to customer specific requirements.

Full traceability

Of course, meat quality and food safety are of extreme importance. In striving to produce the highest quality meat possible, Danish Crown expressed the need to trace back each animal throughout the production chain. NAWI offers the solution with their state-of-the-art track and trace system.

By combining scales, label printers, scanners, PCs and their Integrated Production and Management System, the entire Danish Crown production chain can be continuously monitored, from beginning to end. Food safety demands strict hygiene standards and easy maintenance. Therefore, the existing designs were examined closely with regards to hygiene and redesigned where necessary.

Increasing overall energy efficiency without affecting the slaughter quality is also high upon the Danish Crown agenda.

The line is developed taking into account the BAT (Best Available Techniques) approach, ensuring that the solutions used are the best available for reducing water use, waste water, and energy consumption during the whole process.

Recent merger is perfect match

SFKLEBLANC

In August, NAWI BV announced that the company joined forces with SFK LEBLANC. The new company, operating under the name SFK LEBLANC, is now one of the world's leading manufacturers of high-end slaughter, cutting and deboning lines for the red meat industry and logistic solutions for the food processing industry. SFK LEBLANC markets two major brands – NAWI for cattle, sheep and logistic solutions, and SFK LEBLANC for pork lines and automation concepts.

The company has six offices worldwide, in Denmark, The Netherlands, Canada, USA, China and Russia. The merger brought together more than 500 employees and underlines the ambition of both NAWI BV and SFK LEBLANC to become the preferred supplier within the industry.

"Although strong individually, the two companies are without question far more powerful and effective together. It is a perfect match. With our combined team, our customers have a lot to look forward to," Stephan Toxopeüs, managing director of NAWI BV, told International Meat Topics.

Future

NAWI has a lot of experience in developing and producing complete slaughter lines and equipment. However, the completeness and sheer size of the slaughter line, which includes a quartering area, a quick chiller, 13 chill rooms, two quarter chillers and a fully equipped fifth quarter factory, make this project an

interesting challenge for NAWI.

"We have ambitious plans for our product group. The merger with SFK LEBLANC has opened up interesting new markets for us, such as the fast-growing markets of China and North America. Of course, we will continue to develop and innovate our solutions. We feel excited and optimistic about the future and we look forward to our next chapter as part of SFK LEBLANC," Stephan concluded. ■

